"DAMPER FOR CABLEWAY TRACTION CABLES"

This invention relates to a damper for cableway traction cables in accordance with the classifying part of claim 1.

Cableways of this type comprise a carrying cable stretched between a downstream station and an upstream station and a continuously moving traction cable returned in the respective stations by a pulley of which one is the engine. On the carrying cable run the cars of the cabins hung on the cars through a suspension couplable with the traction cable through a clamp. The clamp itself in this case has a back on one of the jaws, which projects below the traction cable.

If between the downstream and upstream stations there are supports designed for supporting the carrying cable in its path through a support and the traction cable through a roller battery, there is the problem that the clamp upon passage of the car must raise the traction cable in order not to come into contact with the roller battery. Immediately after passage of the vehicle, the traction cable again rests on the roller battery of the support and the impact generates a wave, that is a slamming in the traction cable which spreads along the line while being reflected and increasing in amplitude upon approach of the vehicle especially when the crest of the spreading wave and the crest of the reflected wave are superimposed. It is easily imaginable that these waves create skipping and, in addition to being unpleasant for the passengers, they could cause an unacceptable movement of the traction cable.

The purpose of this invention is therefore to suppress or at least reduce the problem of wave generation while avoiding as much as possible slamming and skipping by proposing a damping and cushioning device designed to reduce as much as possible the wave formation origin.

This purpose is achieved in accordance with this invention in the characterizing part of claim 1.

Bending at the entrance of the roller battery a lever bearing at its other end a roller engaged on the traction cable, and loading the lever by elastic means or weights towards the traction cable, the back of the clamp or even the lock washer thereof, if any, is arranged more gently on this cushioned roller. Loading of this lever is chosen in such a way as to soften passage of this roller over the back of the clamp. In an improvement, the lever is loaded by a spring and cushioned by a shock absorber.

The shock absorber is preferably adjustable and is the pneumatic or hydraulic type.

In another example of realization, a two-armed lever of which one arm is joined at its free end to a support structure and supported by a compression spring as regards the roller battery, is associated with the lever joined to a roller, preferably in front of the first roller of the roller battery, while the other arm bears at its free end a guide running on the carrying cable with there being provided in the elbow of the two-armed lever a contrast medium suited to running on the lever joined to the first roller by lowering the lever to an optimal distance to allow the clamp to pass over this roller without

interference.

In a variant, the guide of the second arm is made up of a grooved roller.

The contrast means is preferably a pin or a roller.

Further features and advantages of the cableway according to the invention will be apparent from the claims and the following description of two examples of preferred embodiments shown in the enclosed drawings, wherein:

FIG 1 shows a side view of a detail of a cableway in accordance with this invention, and

FIG 2 shows a detail of a cableway in side view.

With reference to the figures, reference number 1 designates a whole cableway. One of the two cables is a carrying cable 2 stretched between a station downstream and one upstream. The other cable is a traction cable 3 returned by respective pulleys of the downstream and upstream stations to run continuously.

Through a suspension 4 a cabin, not shown, the cabin is connected in a known manner with a car 5 running on the carrying cable.

The suspension 4 is fitted in a known manner with a clamp 6 designed to be coupled to the traction cable in a decouplable manner. The clamp 6 has a back 7 projecting below with or without a lock washer 8.

Between the downstream and upstream stations there is provided a plurality of supports (not shown) fitted with a support 9 for the carrying cable 2 and a roller battery 10 in which the traction cable runs.

In accordance with this invention at the first roller of

the roller battery in the articulated joint 11 a lever 12 is engaged and bears at its free end a roller or groove 13 loaded by a spring 14 towards the traction cable and damped in its movement by a shock absorber 15.

With a support in an articulated joint 17 is engaged an arm 18 of an angled two-armed lever 19 which is loaded by means of a spring 20 so that the second arm 21 of the lever 19 is pressed through a guide 22 at the free end of the second arm on to the carrying cable.

The two-armed lever 19 is fitted at its elbow with a pin 23 designed to shift the lever 12 depending on the position of the carrying cable.

It is clear that numerous variants can be provided without gong beyond the protective scope.

Thus, for example, both the pin 23 and the guide 22 can be replaced respectively by a roller to reduce friction.